

Title (en)

PROCESS AND DEVICE FOR THE PRODUCTION AND DIRECT APPLICATION OF READY-TO-USE BUILDING MATERIAL PREPARATIONS

Publication

EP 0120812 A3 19860226 (DE)

Application

EP 84810131 A 19840320

Priority

CH 163583 A 19830326

Abstract (en)

[origin: US4585353A] A process for the preparation and immediate use in situ of ready to use blends of structural material, such as plaster, mortar, stucco, tile adhesive or similar blends, which, in contrast to the usual methods does not use as a raw material a dry mixture of the three main components binder, filler and additives. Instead a dry mix of binder and filler is prepared at the building site, and an aqueous solution of the additives is added in a separate mixing operation, immediately followed by the application in situ of the finished blend. This method avoids the difficulties associated with the use of dry mixtures containing all three components. The invention includes an apparatus for mixing and immediate application of the blends as defined by the process claims. In an especially advantageous form of the invention, part of the aqueous solution of additives is added to the rest of the blend, after mixing and preferably at a point situated between the conveyor pump and the transport hose, in the form of a cylindrical thin concentric mantle surrounding a core of the wet blend. Much of the friction between the structural blend and the transport conduit can thus be avoided, as well as the wear associated with it. The application of the structural blend can be assisted by pressurized air injected into the stream upstream of the applicator nozzle. The stream of air may be loaded with airborne particles of silicone solution in order to impart water repellency to the structural layers made by the process.

IPC 1-7

C04B 13/00; **B28C 5/38**; **E04G 21/04**

IPC 8 full level

B28C 5/12 (2006.01); **B28C 5/38** (2006.01); **C04B 40/00** (2006.01); **C04B 40/06** (2006.01); **E04G 21/04** (2006.01)

CPC (source: EP US)

B28C 5/1261 (2013.01 - EP US); **B28C 5/1284** (2013.01 - EP US); **C04B 40/0028** (2013.01 - EP US); **C04B 40/06** (2013.01 - EP US)

Citation (search report)

- [X] BE 720757 A 19690312
- [A] DE 2947913 A1 19810604 - COMPERNASS JOSEF
- [A] DE 2130257 B2 19740815
- [A] DE 2453527 B2 19780524
- [A] DE 2228198 A1 19730329 - LAFARGE CEMENTS SA
- [A] US 1592672 A 19260713
- [A] EP 0035281 A2 19810909 - ENG RESOURCES DEV OFFICE [JP]
- [A] AT 327511 B 19760210 - EUGEN DIETTERLE KG GIPS UND SA [DE]
- [A] DE 2059442 A1 19720608 - GREBE KONRAD
- [X] SOVIET INVENTIONS ILLUSTRATED, Section Chemical, Woche E12, 5. Mai 1982, Abstract Nr. E12, LO2, Derwent Publication Ltd., London, GB; & SU-A-833 705 (UKR HYDRO-TECH AMEL) 10.06.1981
- [A] PATENT ABSTRACTS OF JAPAN, Band 7, Nr. 11 (C-145)[1156], 18. Januar 1983; & JP-A-57 167 769 (SUMITOMO KAGAKU KOGYO K.K.) 15.10.1982

Cited by

AT398754B; EP0544179A1; EP0729925A1; AT523413A4; AT523413B1; EP0191901A1; US4772327A; DE202021104334U1; EP3970843A2; EP3260258B1; EP3664981B1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

EP 0120812 A2 19841003; **EP 0120812 A3 19860226**; **EP 0120812 B1 19890208**; AT E40671 T1 19890215; CA 1216165 A 19870106; CH 658240 A5 19861031; DE 3476654 D1 19890316; US 4585353 A 19860429; US 4708745 A 19871124

DOCDB simple family (application)

EP 84810131 A 19840320; AT 84810131 T 19840320; CA 450371 A 19840323; CH 163583 A 19830326; DE 3476654 T 19840320; US 59336784 A 19840326; US 82009186 A 19860121